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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,843

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Zbigniew Combrowski

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BACHMAN & LAPOINTE, P.C.  
900 CHAPEL STREET  
SUITE 1201  
NEW HAVEN, CT 06510

EXAMINER

GIONTA, ALLISON

ART UNIT

PAPER NUMBER

1777

MAIL DATE

DELIVERY MODE

10/12/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,843	<b>Applicant(s)</b> COMBROWSKI, ZBIGNIEW	
	<b>Examiner</b> ALLISON GIONTA	<b>Art Unit</b> 1777	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-36 is/are pending in the application.
- 4a) Of the above claim(s) 27-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/21/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. *Claims 18, 19, 20, 21, 22, 23, 24, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grienberger et al. (5464542) and further in view of Kellerwessel (DE3321565, cited on the ISR).*

*Regarding claims 18, 20, 21, 22, 23, 24, 25 and 26*, Grienbrier et al. teach a method of treating, filtering and cleaning a working medium comprising the steps of providing at least one filter (Fig. 2 and 3, 8) in a filter housing (Fig. 2, 1) which is adjoined by a discharging arrangement for discharging a filter cake (Fig. 2, 23; col. 6, lines 25-30), discharging the compacted filter cake once a predetermined thickness has been reached (col. 6, lines 9-11), back-flushing the at least one filter at certain time intervals (pulse) (col. 6, lines 28-30), with air or some other pressure medium introduced to the interior of the filter (col. 6, lines 17-23; Fig. 2, 15 and 16 wherein air pocket is pressurized against the filter see col. 2, lines 40-60) and the external part of the filter is subjected to the working medium during back-flushing (col. 2, lines 40-44 and Figure 2, 6 wherein the filter is submerged during back-flushing). The filter is subjected to a flushing medium via flushing nozzles which are oriented in the direction of the filter (col. 6, lines 17-23; Fig. 2, 16). Because the drum filter continuously rotates during back-flushing (col. 5, lines 25-28) the flushing medium coming from the liquid spray nozzles (16) moves in vortex

Art Unit: 1797

during transfer between the housing and the discharging arrangement (23). The filter housing is further subjected to suction pressure for the purpose of discharging and extracting the filter cake (col. 5, lines 54-57; col. 6, lines 22-27).

Grienbrier et al. do not teach wherein the filtered-out particles are compacted into a filter cake in the discharging apparatus or wherein the discharging apparatus is a feed hopper.

However, in the analogous art of drum filters and filter cleaning methods Kellerwessel teaches that a feed hopper is a well-known type of discharging apparatus and is comprises a mechanical compression element (Fig. 1, 15) that compresses the filtered out particles (8) into a compact filter cake (10) for the benefit of compressing the filtered particles therein extending the working interval of the filter and also minimizing waste.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a feed hopper comprising a piston, as taught by Kellerwessel, for the benefit of extending the working intervals of the filter device and minimizing waste.

Grienbrier et al. and Kellerwessel do not explicitly teach the method further determining the thickness of the cake via a distance measurement when a certain thickness of a briquette of a pressing piston has been reached. However, from Kellerwessel's Figure 1, it is clear that if the briquette (compacted filtered particles) (8) becomes too high, the discharge device would be ineffective in removing the filtered particles because the filtered particles would remain backed up to the filter (1). Therefore, any one of ordinary skill in the art would recognize that it would have been obvious at the time of the invention to determine at what height the growth of the compacted filtered particles would interfere with the filter operation, determine that measurement in a 'distance' measurement for the benefit of preventing filter blockage.

Art Unit: 1797

Further, Grienbrier et al. and Kellerwessel do not explicitly teach increasing the pressure of the piston during a final pressing step after determining the pressure of the piston. However, any one of ordinary skill in the art at the time of the invention would have found it obvious, and borderline second nature, to determine the pressure of the piston as to make sure the piston is not under pressure that would break the device and increasing the pressure of the piston during the final pressing steps for the benefit of compacting the filtered particles into the smallest area possible therein decreasing the space required for waste disposal. The Examiner would also like to note that, with regards to method steps involving "determining", "determining" is considered a mental step and lends little patentable weight to the claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLISON GIONTA whose telephone number is (571)270-1767. The examiner can normally be reached on M-F: 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/  
Primary Examiner, Art Unit 1777

/AMG/